Orthopaedic Section of the APTA
Grant Program
Annual Progress Report Form

Date: 8 January 2019

Name of the investigators: Co-PI: Lori Michener, PhD, PT, ATC, FAPTA; Division of Biokinesiology and Physical Therapy; University of Southern California; Co-PI: Chuck Thigpen, PhD, PT, ATC; ATI Physical Therapy, Greenville, SC.

Name of Grant: Shoulder Pain: Effects of Adherence to Practice Guidelines and Dose of Physical Therapy on Outcomes of Care. SPEADO Project

Award Period: 1 May 2017 – 30 April 2019

Current year of award: Year 2

1) Summary of accomplishments in the past year:

Established goals as per our timeline in the grant proposal for Year 1, and the status of each goal:

Goal	Status
1-IRB approval at all sites involved in the SPEADO project – USC and ATI clinics	Completed
2-Routine data collection via EMR at USC and ATI clinics	Completed and continuing
3-Recruitment of Non-USC/ ATI clinic sites for participation	Initiated contact with 2 clinics. See below for more details.
4-REDCap data collection template completed for NON-USC/ ATI clinic sites	Initiated contact with 2 clinics. See below for more details.
5- Data collection training and collection at NON-USC / ATI sites	Initiated contact with 2 clinics. See below for more details.
6- Data abstraction and refinement to create working data set from EMR	Initiated and continuing as per timeline. See below for more details
7- Data refinement to create working data set from all sites	Initiated and continuing as per timeline. See below for more details
8- Analysis for all AIMS	Initiated and continuing as per timeline. See below for more details

We have initiated or achieved all goals as established on our timeline. For the ATI clinics, we have extracted data from their EMR records for all necessary data elements. We are in the process of converting and refining the data elements to create a working data set. The Shoulder National Database Module developed by the Orthopaedic Section of the APTA is the framework for defining the treatment delivered and outcomes of care data elements. This module will allows for the systematic definition of the diagnosis, treatment delivered to determine adherence to CPGs, and outcomes of care. For the USC sites, we have contracted with the APTA PT Outcomes Registry for data extraction from our EMR. The APTA PT Outcomes Registry is scheduled to extract data from our EMR routine data collection using the Shoulder Module. At USC, we have signed up the physical therapists at the clinic. The next step is the completion of the data extraction methodology by the APTA PT Outcomes Registry. However, the APTA PT Outcomes Registry process is making very slow progress. We have established a secondary plan for data collection at USC: we have hired and recruited volunteer staff to manually extract data from our USC – EMR to achieve our n=120 patients at USC. If possible, we will initiate recruitment of other clinicians and clinics outside of ATI and USC, once the Shoulder National Database Module is formatted and fully functional in the PT Outcomes Registry.

2) Provide a one paragraph summary of results or abstract suitable for posting on the Orthopaedic Section website:

Shoulder pain is a common musculoskeletal condition. There is a tremendous amount of evidence critically summarized in the form of Clinical Practice Guidelines (CPGs). The CPGs are intended to guide clinicians in the treatment of patients with musculoskeletal shoulder pain. There are CPGs for adhesive capsulitis and rotator cuff disease, one of which is has been developed by a team appointed by the Orthopaedic Section of the APTA. There is a lack of research on the effects of adherence to these CPGs, and their relationship to outcomes and dose of care in patients with shoulder pain. The project goals are to convert clinical data into meaningful data elements that will be used to characterize the outcomes of care and dose of physical therapy, and adherence to CPGs. Specifically we will 1- characterize the effects of adherence to CPGs on patient-rated outcomes of care for patients undergoing physical therapy for shoulder pain, and 2- determine if dose of care (visits) is effected by adherence to CPGs, and related to outcomes of care for patients receiving physical therapy for shoulder pain. In our first year we have extracted data from the EMR records for all necessary data elements at 1 of our sites, and are in the process of converting and refining the data elements to create a working data set. The Shoulder National Database Module developed by the Orthopaedic Section of the APTA is the framework for defining the treatment delivered and outcomes of care data elements. This module will allows for the systematic definition of the diagnosis, treatment delivered to determine adherence to CPGs, and outcomes of care. At the second clinical site, we will use the APTA PT Outcomes Registry for data extraction from the EMR or manually extract the data using the shoulder module. The APTA PT Outcomes Registry or manual extraction from our USC EMR of routine data collection using the Shoulder Module. The next step is data extraction methodology by the APTA PT Outcomes Registry or/and manual extraction from our USC-EMR. In the next year, we recruit clinics / clinicians who have signed up for the PT Outcomes Registry to participate in our study. We will initiated recruitment of other clinicians and clinics once the Shoulder National Database Module is formatted in the PT Outcomes Registry.

3) Publications published or accepted during the past year.

No publications or abstracts were submitted during Year 1.

4) Budget:

Expense Category	Budgeted Amount Year 1	Actual Amount Spent Year 1	Amount Remaining in Year 1 Budget	Budgeted Year 2	Total Budgeted Amount Year 2	Actual Amount Spent Year 2	Amount Remaining in Year 2 Budget
Study Personnel: PIs	$4,438	$4,256	$182	$4,549	$4,731	$4,823	-($92)
Study Personnel: Consultants	$4,400	$2,000	$2,400	$5,900	$8,300	$6,472	$1,828
Programming for EMR data extraction & organization	$4,500	$0	$4,500	$3,500	$8,000	$0	$8,000
Travel	$1,500	$0	$1,500	$1,000	$2,500	$0	$2,500
Total	**$14,838**	**$6,256**	**$8,582**	**$14,949**	**$23,531**	**$11,295**	**$12,236**

* $4,500 was not used for programming for year 1 for data extraction, as we are in process of that task.

5) Objectives for the next year: Our objectives during Y3 are to complete the items described above in #1, and perform data analysis for all aims, produce results in the form of abstracts and manuscripts, and leverage these finds to apply for funding to continuing to examine the outcomes and process of care for patients with other musculoskeletal conditions treated by physical therapists.